

Civil Report Card On GPS Performance

August 2008

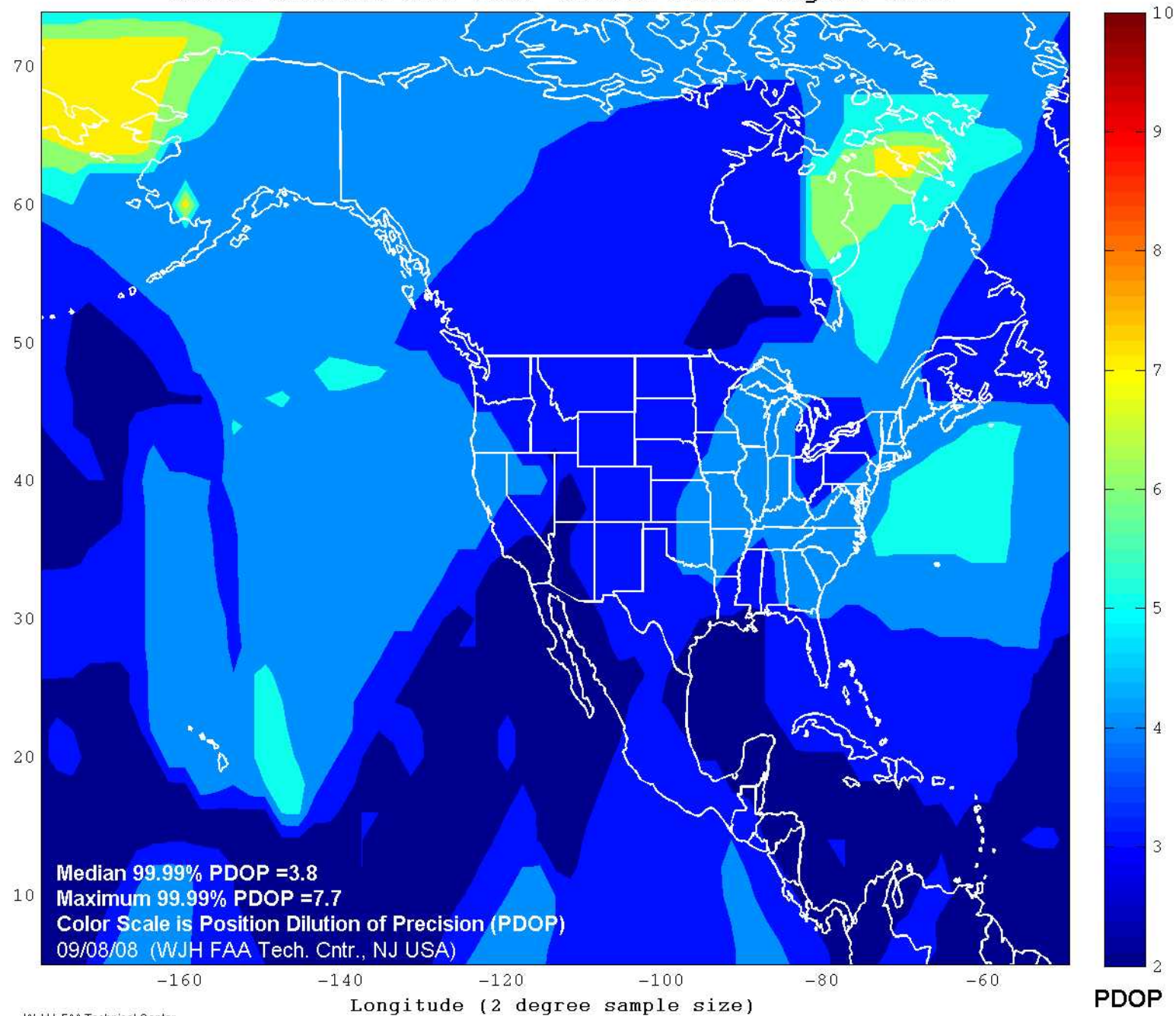
Operational Performance Parameter	CY 2007	July 2008	August 2008	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	29.80	30.94	30.98	↑	→
<i>Average number of satellites usable in primary slots</i>	23.91 (99.62%)	23.97 (99.85%)	23.98 (99.90%)	→	→
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.8	1.6	1.6	↑	→
<i>Worst Site</i>	3.4	11.9	3.4	→	↑
99.99% Vertical DOP					
<i>Area Median</i>	3.3	2.9	3.5	↓	↓
<i>Worst Site</i>	7.4	11.3	7.5	→	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.6	3.2	3.8	↓	↓
<i>Worst Site</i>	7.8	15.1	7.7	→	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.77	1.43	1.49	↑	→
<i>Worst Satellite</i>	2.29	1.89	1.92	↑	→
95% Horizontal Error					
<i>Area Median</i>	2.32	1.94	2.03	↑	→
<i>Worst Site</i>	3.63	2.21	2.64	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.81%	99.96%	99.99%	↑	↑
95% Vertical Error					
<i>Area Median</i>	4.45	3.54	3.65	↑	→
<i>Worst Site</i>	4.95	4.21	4.36	↑	→
<i>Availability (% < 9m (historical 3-sigma))</i>	99.92%	99.98%	99.98%	↑	→

Key: ↑ improving ↓ worsening → no significant change

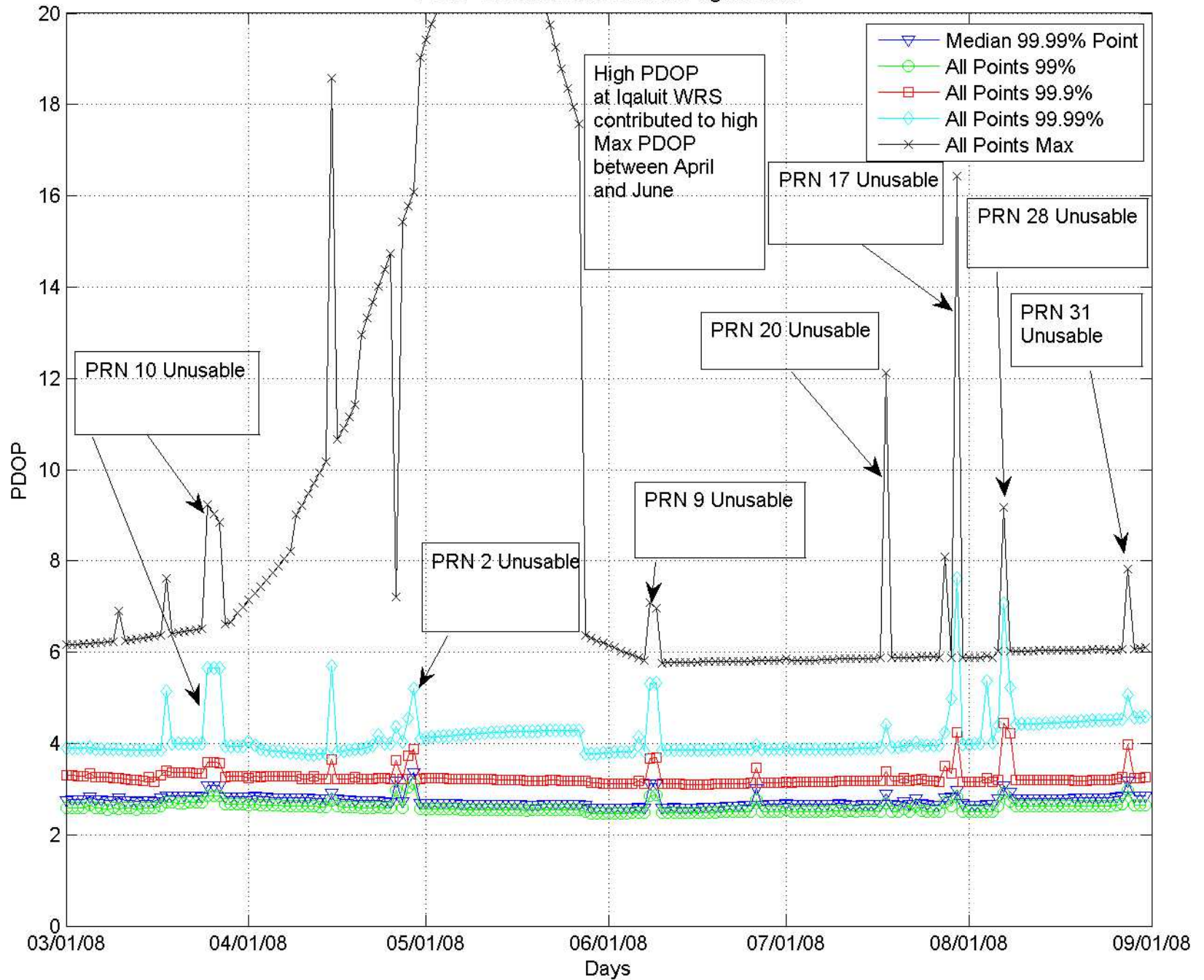
Long Term is current month vs. prior 24 months, Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

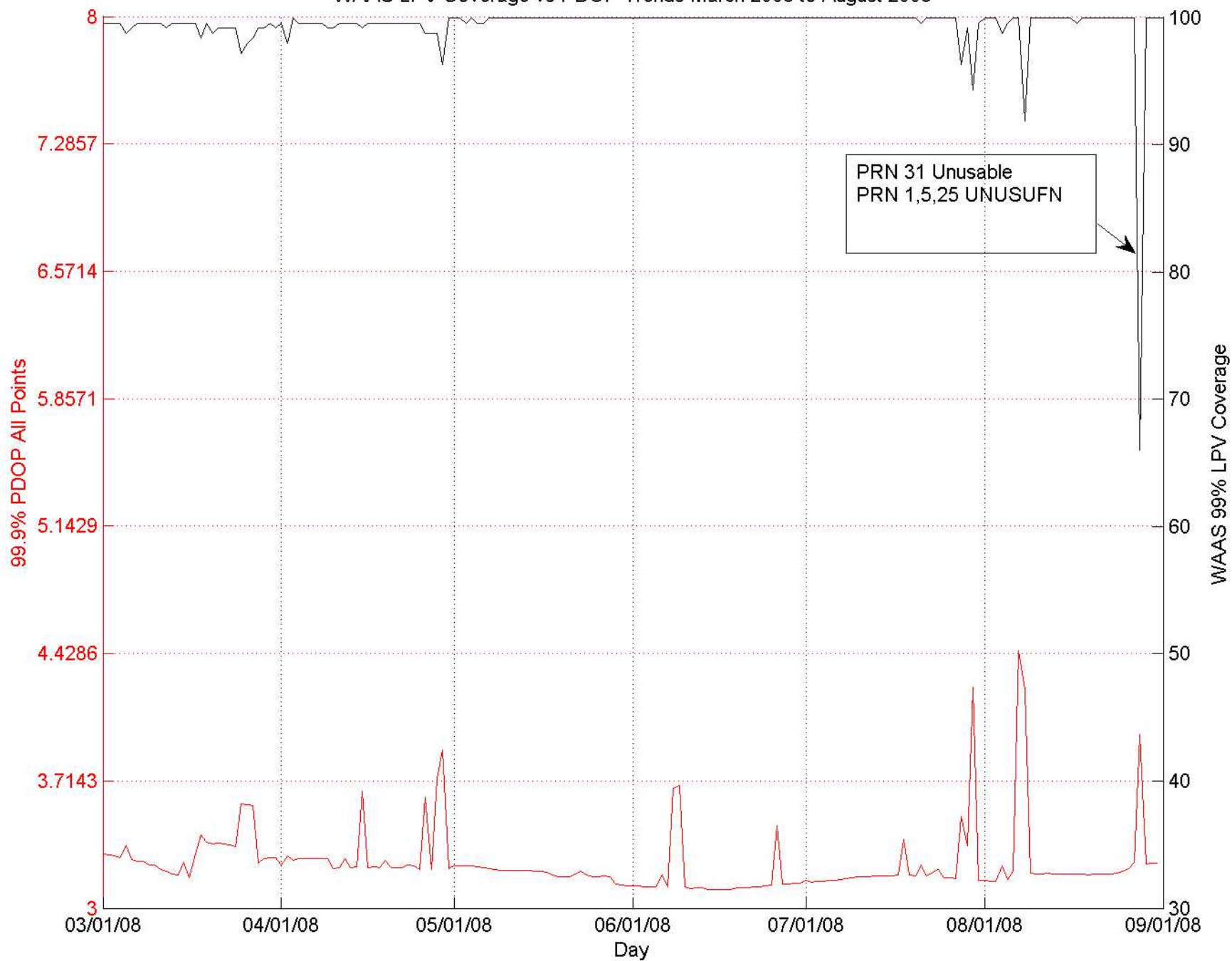
North America GPS PDOP 99.99% Index August 2008



PDOP Trends March 2008 to August 2008



WAAS LPV Coverage vs PDOP Trends March 2008 to August 2008



Six Satellite Availability Trends March 2008 to August 2008

